

# **METHODS AND SYSTEMS FOR ARC INTERRUPTION MODELING**

## **Abstract of Disclosure**

Methods and systems for modeling arc behavior are described. In an exemplary embodiment, the method includes the steps of determining electrical conductivity distribution in an arc and determining a current density distribution of the arc based on the determined electrical conductivity.

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T.03 T.90 2.55 T.69 60

Variable	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis	Jarque-Bera	Probability
Age	35.5	10.5	20	65	-0.1	3.0	0.00	0.99
Gender	0.5	0.5	0	1	0.0	3.0	0.00	0.99
Marital Status	0.7	0.5	0	1	0.0	3.0	0.00	0.99
Education	12.5	2.0	10	16	-0.1	3.0	0.00	0.99
Income	15000	5000	5000	30000	-0.1	3.0	0.00	0.99
Assets	100000	50000	0	200000	-0.1	3.0	0.00	0.99
Liabilities	50000	25000	0	100000	-0.1	3.0	0.00	0.99
Debt Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
Equity Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
Capital Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
Debt to Equity Ratio	1.0	0.5	0	2.0	-0.1	3.0	0.00	0.99
Debt to Capital Ratio	1.0	0.5	0	2.0	-0.1	3.0	0.00	0.99
Debt to Assets Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
Equity to Assets Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
Capital to Assets Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
Debt to Total Capital Ratio	1.0	0.5	0	2.0	-0.1	3.0	0.00	0.99
Equity to Total Capital Ratio	1.0	0.5	0	2.0	-0.1	3.0	0.00	0.99
Capital to Total Assets Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
Debt to Total Assets Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
Equity to Total Liabilities Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
Capital to Total Liabilities Ratio	0.5	0.2	0	1	-0.1	3.0	0.00	0.99
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